

ABSTRACT

A surface mountable laminated circuit protection device comprises a first metal layer including a first unit and a second unit, a first insulating layer disposed on the first metal layer, and a second metal layer disposed on the first insulated layer. There is also a composite electroplated layer containing carbon black disposed on the second metal layer, and a first conductive composite material having positive temperature coefficient (PTC) characteristics disposed on the composite electroplated layer containing carbon black. Above the first conductive composite material is a third metal layer. Furthermore, there is a first conducting mechanism for conducting the first metal layer and the second metal to each other; and a second conducting mechanism for conducting the third metal layer and the first metal layer to each other. The application of double-sided metal foil clad substrate simplifies the production process of the protection device and improves its structural strength and dimensional stability.